

Tips from the Workbench Ozwinds Brisbane

Tip #5 – Flute Adjusting Screws

After one of the previous tips, someone asked me a question about flute F keys (and its companion key) going out of position, and getting them sealing again.

This is a little bit of a tricky question because the answer is not always the same.

There can be various reasons why a flute key may not seal, so if you are trying just one method to seal a pad, it may not work.

Here is the tip: *Adjusting screws on flutes will only work if individual pads are already sealing.*

I know that for people who are not flute technicians, this subject can create a little consternation. This is often because previous efforts to adjust the screws have failed to achieve the desired result.

For one thing, the pad (made from cardboard and felt) may just be too old to keep its shape. Either that, or it is just not sitting level over the tone-hole because the pad cup is bent, or the flute has a bend in it (even a very slight bend can make a big difference).

What can you do about it?

Let's take a look at the F-key as an example. Let's say that the F-key is closing before its companion key.

There should be a screw somewhere in between the F key and the other companion key. This will be either on the top side or the underside of the keywork. You could try turning it in slightly and see if it helps. Turn it in to make the companion key close more, turn it out to make the F-key close more.

This will only work if the pad is already able to seal its own tone-hole. Otherwise, the F-key will start to rise up above its tone-hole and *also* stop sealing. In this scenario a repair technician will probably need to attend to the problem.

How dangerous is this procedure?

Turning the adjusting screws is very safe (provided you don't slip). You really can't do any damage to a flute in this way.

If a flute is not working because the keys seem to be out of adjustment, what do you have to lose? The best and worst case scenario is that the flute might start working again.

Just make sure that you are using an appropriate screwdriver for the job (fits snugly into the adjusting screw slot).

Diagnosing the problem

The other thing that you can do is to find out whether it is the pad or the adjusting screw. Each pad should be able to close individually (if the flute doesn't have split-E then the two G-pads will close simultaneously).

Take a piece of tally-ho paper and cut off the gummy edge, then cut a wedge out of the remaining piece.



Place the small end of the wedge between the pad and the tone hole that you want to check, gently close the key and pull the wedge out while the pad is (gently!) closed.

If you can feel some grip of the pad touching the tone hole, then that's good. If not, then there is a leak.

Don't do this too much because paper can act like sandpaper on the pad surface.

In this way, you can check how the pad is sealing all the way around the tone-hole. Do this for each pad. Firstly for the companion key, then for the F-key.

If the F-key doesn't close then undo the screw until it does. If the F key doesn't close and the companion key clearly sits above the tone-hole (also doesn't close), then there could be another problem with the connection to the Bb key.

Learning how to make adjustments to the flute is something that we run through in the hands-on workshop.

It is a little easier to show and do, than to write about, but feel free to have a go on your own instruments. Perhaps you could try it on a flute or two just before you bring them in for a service. At least you can gain some insight into how flute keys work.

Future Tips

If there is anything that you would like to know, and are looking for an answer, please let me know. I might be able to include it in some tips for teachers.

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